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13  
14                   **UNITED STATES DISTRICT COURT**  
15                   **NORTHERN DISTRICT OF CALIFORNIA**

16  
17 IN RE PACIFIC FERTILITY CENTER  
18 LITIGATION

19  
20 This Document Relates to:  
21 No. 3:18-cv-01586  
22 (A.B., C.D., E.F., G.H., and I.J.)

23 Master Case No. 3:18-cv-01586-JSC

24  
25                   **PLAINTIFFS' OPPOSITION TO**  
26                   **CHART'S MOTION FOR SUMMARY**  
27                   **JUDGMENT**

28 Date: March 4, 2021  
Time: 9:00 a.m.  
Judge: Hon. Jacqueline S. Corley  
Place: Courtroom F, 15th Floor

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## 1 INTRODUCTION

2 Defendant Chart designed and manufactured a vacuum-insulated storage tank to maintain  
3 biological samples at cryogenic temperatures with a minimal loss of liquid nitrogen each day. That tank  
4 was filled with liquid nitrogen at the close of business on March 3, 2018, but the very next day was  
5 found to have imploded and lost all liquid nitrogen. Subsequent testing revealed that one of the tank's  
6 interior welds had cracked. Plaintiffs are fertility patients whose eggs and embryos were stored in  
7 Chart's tank; they seek to hold Chart responsible for manufacturing a defective product and failing to  
8 recall or retrofit that product prior to the March 4th incident. Chart denies all responsibility and requests  
9 that summary judgment be entered in its favor.

10 Chart makes five arguments in support of its motion for summary judgment. First, Chart says  
11 Plaintiffs' liability expert is not qualified and without his testimony, Plaintiffs cannot show Chart's tank  
12 caused the March 4th incident. That expert is a forensic engineer who has more than thirty years of  
13 experience analyzing failed metal components and regularly taught the Failure Analysis and Prevention  
14 course at Duke University. His testimony is admissible and will be helpful to the jury in evaluating the  
15 extensive post-mortem testing that was performed on Chart's tank. But even without the assistance of  
16 an expert, the jury could reasonably conclude that Chart's product was responsible for the March 4th  
17 incident. One of Chart's own documents states that a cracked weld causes a sudden loss of vacuum and  
18 implosion, which is exactly what happened here. There is no other rational explanation for why a  
19 cryogenic tank would lose all liquid nitrogen overnight and implode. In fact, the only alternative  
20 explanation that Chart has offered requires the jury to believe that multiple embryologists are lying  
21 about keeping the tank filled with liquid nitrogen. Chart is entitled to ask the jury to disregard sworn  
22 testimony, but that is not something the Court can do at the summary judgment phase.

23 Second, Chart says a jury should not be permitted to use the consumer expectation test when  
24 assessing whether Chart's tank was defective in design. Chart claims the consumer expectation test is  
25 not appropriate because its cryogenic containers are complex and jurors are unlikely to have worked  
26 with them on an everyday basis. But as a recent California Court of Appeal decision affirmed, "the  
27 consumer expectation test can apply to complex or technical products, even where the use of these  
28 products may not be within the common knowledge of jurors." *Demara v. The Raymond Corp.*, 13 Cal.

1 App. 5th 545 (2017). The relevant question is not whether jurors use cryogenic containers, but whether  
 2 those who do use them have minimum expectations that the jurors could reasonably find have not been  
 3 met. Here, a jury could reasonably credit Plaintiffs' evidence that, just as a thermos is not expected to  
 4 lose its cooling ability overnight, the embryologists who use Chart cryogenic containers on a daily basis  
 5 do not expect those containers to suddenly lose all of their vacuum insulation, consume 14 inches of  
 6 liquid nitrogen within 24 hours, and implode.

7 Third, Chart says a jury cannot reasonably find that it acted negligently when it failed to retrofit  
 8 or recall its tank's electronic controller, which lost the ability to warn of dangerously low liquid  
 9 nitrogen levels about two weeks before the March 4th incident. Chart says Plaintiffs have presented no  
 10 expert testimony to establish that its electronic controllers were defective. [REDACTED]

11 [REDACTED]  
 12 [REDACTED]  
 13 [REDACTED]  
 14 [REDACTED] The fertility  
 15 clinic's employees have testified that if Chart's controller had not malfunctioned, it would have sent  
 16 them mobile alerts and the March 4th incident would have been averted. Under these circumstances, a  
 17 jury could reasonably find that Chart's failure to retrofit or recall its electronic controller contributed to  
 18 the March 4th incident.

19 Fourth, Chart says Plaintiffs cannot recover punitive damages because there is no evidence it  
 20 intentionally concealed material facts or engaged in despicable conduct with willful and conscious  
 21 disregard for the rights of others. [REDACTED]

22 [REDACTED]  
 23 [REDACTED]  
 24 [REDACTED]  
 25 [REDACTED] But rather than  
 26 retrofit its defective controllers to alleviate the possibility that a weld failure would have tragic  
 27 consequences, Chart did nothing. [REDACTED]

28 [REDACTED]. An award of punitive damages is

1 needed to deter Chart from continuing to conceal known defects that jeopardize its customers'  
 2 irreplaceable biological tissue.

3 Fifth, Chart says Plaintiff G.H. cannot recover damages for the diminished possibility that her  
 4 two frozen eggs could yield a healthy child. Multiple experts have testified that G.H.'s chances were  
 5 greatly diminished by the March 4th incident, dropping from about 17% down to 2%. But Chart claims  
 6 that G.H. cannot recover damages for that loss unless she can show her chances were greater than 50%  
 7 before the March 4th incident. Chart's argument is based on a misunderstanding of California case law.  
 8 Plaintiffs need to show that it is more likely than not that the March 4th incident contributed to G.H.'s  
 9 diminished chances, not that it is more likely than not G.H. would otherwise have a baby.

10 The evidence that Chart is responsible for its cryogenic tank suddenly losing vacuum and  
 11 imploding is considerable. Plaintiffs respectfully request they be permitted to present that evidence to a  
 12 jury, and that Chart's motion for summary judgment be denied.

## 13 SUMMARY OF FACTS

### 14 I. The March 4th incident

15 On Sunday, March 4, 2018, as the Laboratory Director at the Pacific Fertility Center was  
 16 preparing to close up for the day, he discovered that the lid of one of the lab's cryopreservation tanks  
 17 was stuck in place and condensation had pooled on the floor. (Zeman Decl., Ex. 32 (10/09/19 Pacific  
 18 MSO 30(b)(6) and Conaghan Dep.) at 100, 115-116.) That tank was called "Tank 4" and it contained  
 19 2,500 embryos and 1,500 eggs from patients who had undergone egg-retrieval or IVF procedures. (*Id.*,  
 20 Ex. 33 (Pacific MSO 30(b)(6) and Romney Dep.) at 140; *id.*, Ex. 34 (MSO001984) at 1986.) The Lab  
 21 Director immediately recognized something had gone seriously wrong. (*Id.*, Ex. 32 (10/09/19 Pacific  
 22 MSO 30(b)(6) and Conaghan Dep.) at 100.) Much like a thermos, cryopreservation tanks depend on a  
 23 vacuum layer to insulate frozen eggs and embryos—which are stored in a bath of liquid nitrogen  
 24 at -196° C—from the much warmer, room-temperature laboratory. (*Id.*, Ex. 14 (11/06/20 Report of D.  
 25 Wninger, as amended on 12/04/20 ("Wninger Am. Rep.") at 8; Ex. 35 (Chart 30(b)(6) and Brooks  
 26 Dep.) at 20.) The condensation was a sign the vacuum had failed and the tank was warming—  
 27 endangering the previously frozen eggs and embryos. (Zeman Decl., Ex. 35 (Chart 30(b)(6) and Brooks  
 28 Dep.) at 139-140.) The Lab Director and other embryologists at PFC worked quickly to transfer the

1 eggs and embryos to another tank, but the damage had already been done: ice crystals form when  
 2 cryopreserved samples are exposed to temperatures between -150° C and -132° C, and the jagged edges  
 3 of those crystals cause significant intracellular damage or cell death. (*Id.*, Ex. 32 (10/09/19 Pacific  
 4 MSO 30(b)(6) and Conaghan Dep.) at 119; *id.*, Ex. 15 (Wninger Dep.) at 68; *see also* Section VII,  
 5 *infra.*)

6 The day before, one of PFC's embryologists had refilled Tank 4 and verified that the tank  
 7 contained a sufficient quantity of liquid nitrogen. (*Id.*, Ex. 32 (10/09/19 Pacific MSO 30(b)(6) and  
 8 Conaghan Dep.) at 98-99; *id.*, Ex. 29 (Popwell Dep.) at 129-130.) Although a typical IVF tank  
 9 consumes only about an inch to an inch-and-half of liquid nitrogen each day, PFC's practice was to  
 10 ensure that its tanks contained at least 13 inches of liquid nitrogen at the close of business each day.  
 11 (*Id.*, (10/09/19 Pacific MSO 30(b)(6) and Conaghan Dep.) at 61; *id.*, Ex. 29 (Popwell Dep.) at 41.)  
 12 Embryologist Jean Popwell testified that on that particular Saturday afternoon, she filled Tank 4 up to  
 13 the 14-inch mark on the tank's dipstick. (*Id.*, Ex. 29 (Popwell Dep.) at 129.) [REDACTED]

14 [REDACTED]  
 15 [REDACTED]  
 16 [REDACTED] (Zeman Decl., Ex. 69 (11/06/20 Report of J. Cauthen ("Cauthen  
 17 Rep.") at 8-10; *id.*, Ex. 53 (CHART070093) at Record # 29848; *id.*, Ex. 3 (Cauthen Dep.) at 61-62; *id.*,  
 18 Ex. 37 (MSO000310) at 360.) But when PFC's staff forcibly removed the tank's lid the following  
 19 afternoon, the Lab Director found that Tank 4's liquid nitrogen level was down to an inch at most. (*Id.*,  
 20 Ex. 32 (10/09/19 Pacific MSO 30(b)(6) and Conaghan Dep.) at 112-113.) Because the Lab Director had  
 21 activated the tank's fill function before he realized something was wrong and asked for help removing  
 22 the lid, that inch of liquid nitrogen was most likely newly replenished—meaning that Tank 4 had lost  
 23 all of its liquid nitrogen in less than 24 hours. (*Id.* at 101, 112-113.)

1 After PFC staff finished removing eggs and embryos from Tank 4, they saw why the lid had  
 2 been stuck in place: Tank 4's inner vessel had begun to implode. (*Id.* at 41-42, 114.) And in the hours  
 3 after the tank was emptied, it continued to implode until it was a crumpled mass of stainless steel:



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*Normal Tank*



*Tank 4 after the Incident*

14 **II. Tank 4's vacuum insulation should have lasted 10 years and degraded gradually—giving**  
 15 **PFC embryologists the warning signs they've been trained to look for.**

16 Tank 4 was manufactured in January 2012 by Defendant Chart—a leading supplier of cryogenic  
 17 containers for the IVF industry that claims to have “set the standard for storage of biological materials  
 18 at low temperatures.” (Zeman Decl., Ex. 38 (Chart’s Answers to RFA Set 4) at Answer No. 1; *id.*,  
 19 Ex. 39 (Praxair 30(b)(6) Dep.) at 36; *id.*, Ex. 40 (CHART000007) at CHART000009.) The tank was  
 20 designed to maintain cryogenic temperatures with minimal evaporation of liquid nitrogen, which acts as  
 21 a refrigerant for the biological material. (*Id.*, Ex. 6 (11/06/20 Report of R. Parrington (“Parrington  
 22 Rep.”) at 1.) Under California law, Chart may be held strictly liable if Tank 4 did not perform as safely  
 23 as an ordinary consumer would have expected it to perform when used or misused in an intended or  
 24 reasonably foreseeable way. *See CACI 1203.*

25 One of Plaintiffs’ expert witnesses, David Wininger, has testified that in his opinion, Tank 4  
 26 failed to perform as safely as he and other regular users of cryogenic containers would have expected it  
 27 to perform. (Zeman Decl., Ex. 15 (Wininger Dep.) at 36; *id.*, Ex. 14 (Wininger Am. Rep.) at 14.)  
 28 Wininger is an IVF Lab Director who has worked with cryogenic storage containers for more than 30

1 years, who trains and supervises other users of cryogenic containers, and who inspects cryogenic  
 2 containers at other IVF labs for the College of American Pathologists. (*Id.*, Ex. 14 (Wninger Am. Rep.)  
 3 at 1-2.) As Wninger explains in his expert report, ordinary users expect cryogenic containers to be  
 4 capable of safely storing sensitive biological samples at cryogenic temperatures for a minimum of ten  
 5 years. (*Id.* at 14.) As the container ages, its vacuum insulation is expected to gradually degrade rather  
 6 than to fail suddenly and all at once. (*Id.* at 14; Zeman Decl., Ex. 27 (CHART050770).) That gradual  
 7 degradation eventually manifests in physical symptoms that the container is losing its ability to keep  
 8 samples cold: the container will become cool to the touch, condensation or frost will appear on its outer  
 9 walls, and it will need to be refilled with increasing frequency. (Zeman Decl., Ex. 14 (Wninger Am.  
 10 Rep.) at 14-15.) But no reasonable user expects that a cryogenic container's vacuum will degrade to the  
 11 point the container needs to be replaced inside of ten years, and no reasonable user expects the vacuum  
 12 to fail all at once and consume more than 14 inches of liquid nitrogen in less than 24 hours. (*Id.*)

13 Chart's own expert and documents support Wninger's opinions and confirm that Tank 4 failed  
 14 to store biological material as safely as users expect. Grace Centola, an andrologist who works with  
 15 cryogenic tanks on a regular basis testified that [REDACTED]  
 16 [REDACTED]  
 17 [REDACTED] (*Id.*, Ex. 16 at 46.) [REDACTED]

18 [REDACTED]  
 19 [REDACTED]  
 20 [REDACTED] (Zeman Decl.,  
 21 Ex. 27 (CHART050770).) Chart has represented to regulators that "Chart vacuum-insulated vessels  
 22 provide hold times of at least 7 DAYS," meaning that it should take at least 7 days and often much  
 23 longer before a Chart cryogenic tank loses all of its liquid nitrogen to evaporation. (*Id.*, Ex. 11  
 24 (DFMECA) at BAT-0, PWR-0, PWR-10, CTL-0; *see also id.*, Ex. 41 (Junnier Dep.) at 72-73 (Chart  
 25 vessels "can maintain LN2 and temperature for quite a while, for weeks on end").) [REDACTED]  
 26 [REDACTED]  
 27 [REDACTED]

28 [REDACTED] (*Id.*, Ex. 42 (CHART034331).) And Chart's medical risk

1 management team has assigned the possibility of a total vacuum loss like that suffered by Tank 4 to the  
2 lowest possible risk level: “So unlikely, occurrence not expected.” (*Id.*, Ex. 11 (DFMECA) at DEW-3,  
3 DEW-4; *id.*, Ex. 36 (Risk Estimation).)

4 [REDACTED]  
5 [REDACTED]  
6 [REDACTED] (*Id.*, Ex. 43 (CHART051322).)  
7 [REDACTED]  
8 [REDACTED] (*Id.*)  
9 [REDACTED]  
10 [REDACTED]  
11 [REDACTED]  
12 [REDACTED] (*Id.*, Ex. 44  
13 (CHART062204) at 211.)

14 **III. A cracked weld on the inside of Tank 4 caused the March 4th incident.**

15 The reason Tank 4’s vacuum failed so suddenly was uncovered through post-mortem testing  
16 conducted by experts representing Plaintiffs, Chart, and PFC. (*Id.*, Ex. 1 (11/06/20 Report of A.  
17 Kasbekar, as amended on 11/30/20 (“Kasbekar Am. Rep.”)) at 10-36.) That testing revealed a crack in  
18 a small weld on the inside of the tank—the weld that connects the tank’s fill tube to the tank’s inner  
19 vessel. (*Id.* at 16-19.) Chart’s cryogenic tanks are manufactured with a metal tube that can be used to  
20 fill the tank with liquid nitrogen. (*Id.* at 20.) That tube runs from the top of the tank, down through the  
21 tank’s vacuum insulation layer, and into the inner vessel near the bottom of the tank. The picture on the  
22 following page was taken after Tank 4’s outer vessel was removed; the red circle shows where its liquid  
23 nitrogen fill tube connected to the inner vessel through an elbow fitting.



*Liquid nitrogen tube feeds into Tank 4's inner vessel*

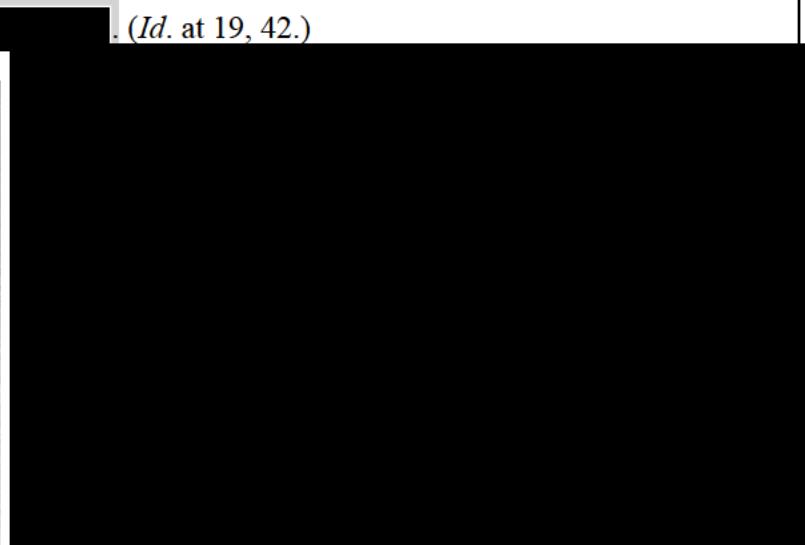
(See *id.* at 25.) The fill tube's elbow fitting was then welded on the inside of Tank 4's inner vessel.

That's the weld that cracked. The image on the left is a close-up up the weld, with red dye indicating a crack.



*Close up of weld – red dye indicates a crack*

*. (Id. at 19, 42.)*



*CT scan of weld showing through wall crack*

1       The crack in Tank 4’s interior weld, though small, had enormous consequences for the tank and  
 2 the reproductive tissue stored inside. That crack allowed liquid nitrogen to seep from Tank 4’s inner  
 3 vessel into its vacuum-insulation layer, where it was warmed by the surrounding laboratory air,  
 4 transitioned from a liquid to a gas, and expanded to almost 700 times its original volume. (*Id.* at 59-60.)  
 5 The presence of so much nitrogen gas trapped between the tank’s inner and outer vessels exerted a  
 6 significant amount of pressure, which is why the inner vessel imploded. *Id.* More importantly, the  
 7 presence of nitrogen gas meant the vacuum insulation that had been impeding heat transfer from the  
 8 tank’s room-temperature surroundings had been destroyed. Heat transfer ordinarily occurs when  
 9 molecules bump into other nearby molecules and transfer some of their energy. When Tank 4’s vacuum  
 10 layer was still intact, it contained very few molecules and so heat transfer from the outside environment  
 11 to Tank 4’s inner vessel was minimal. But once that vacuum layer filled with high-pressure nitrogen  
 12 gas, there were plenty of molecules to facilitate heat transfer and Tank 4 was no longer capable of  
 13 shielding its contents from the warm laboratory air. (*See* Zeman Decl., Ex. 1 (Kasbekar Am. Rep.)  
 14 at 38.)

15       What happened to Tank 4 is exactly what Chart said would happen if an interior weld were to  
 16 crack. Under the European Union’s Medical Device Directive, Chart is required to identify every way  
 17 that its cryogenic containers can fail. Chart’s engineers came up with over a hundred potential failure  
 18 modes. One of them was a crack or leak at the weld joining the liquid nitrogen fill line to the  
 19 container’s inner vessel—the very weld that cracked in Tank 4. If that weld cracked, according to Chart  
 20 the result would be: “Liquid draws into vacuum space, expanding rapidly and causing an inner vessel  
 21 implosion, total vacuum loss. Loss of function of the freezer.” (*Id.*, Ex. 11 (DFMECA).)

	A	B	C	D	E	F
1	<b>Design Failure Mode, Effects and Criticality Analysis</b>					
2	<b>CRYOGENIC FREEZERS: MVE, HECO, VARIO, CRYOSYSTEM FULL AUTO</b>					
3	ID#	Item	Item Function	Potential Design Failure Mode	Potential Cause of Design Failure Mode	Immed Effect of failure
4						
47	DEW-3	Dewar- Annular lines	Fill line from the outer to inner vessel	Crack or leak	Weld Line Failure	Liquid draws into vacuum space, expanding rapidly and causing an inner vessel implosion, total vacuum loss. Loss of function of the freezer

28       *Chart’s Failure Analysis: weld crack causes total vacuum loss and inner vessel implosion*

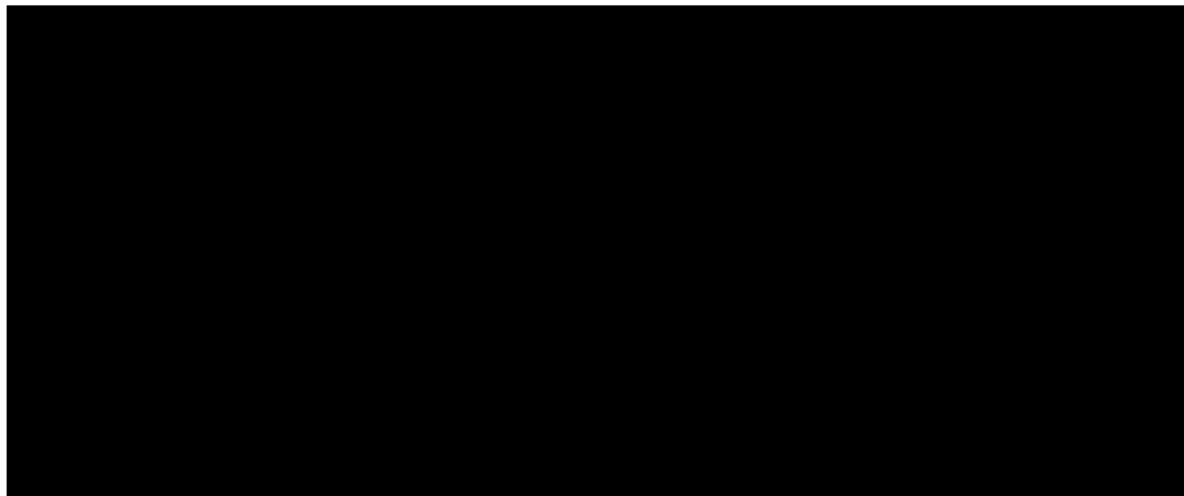
1 [REDACTED]  
2 [REDACTED]  
3 [REDACTED]  
4 [REDACTED]  
5 [REDACTED]  
6 [REDACTED] (*Id.*, Ex. 45 (CHART070695) at 696.) [REDACTED]  
7 [REDACTED]  
8 [REDACTED]  
9 [REDACTED]  
10 [REDACTED] (*Id.*, Ex. 46  
11 (CHART008310) at 310.)

12 **IV. A manufacturing defect caused the cracked weld.**

13 Post-mortem testing of Tank 4 has also revealed why Tank 4's weld cracked: it was too thin and

14 [REDACTED]. (*Id.*, Ex. 1 (Kasbekar Am. Rep.) at 44-45.) [REDACTED]  
15 [REDACTED]  
16 [REDACTED]. (*Id.*, Ex. 10  
17 (CHART070444); *id.*, Ex. 9 (Parrington Dep.) at 113-114, 139-140.) [REDACTED]  
18 [REDACTED]  
19 [REDACTED] (*Id.*, Ex. 1 (Kasbekar Am. Rep.) at 42-43, 53; *id.*, Ex. 9  
20 (Parrington Dep.) at 113-114, 139-140.) [REDACTED]  
21 [REDACTED]  
22 [REDACTED] (*Id.*, Ex. 1 (Kasbekar Am. Rep.) at 42.)  
23 [REDACTED]  
24 [REDACTED]  
25 [REDACTED]  
26 [REDACTED]  
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10 (Id. at 52, 55.)

11 [REDACTED]

12 [REDACTED] (Id. at 38-39, 44, 60-61.)

13 [REDACTED] (Id.)

14 at 38-39.)

15 [REDACTED]

16 (Id.)

17 [REDACTED]

18 [REDACTED]

19 . (Id.)

20 [REDACTED]. (Id.)

21 at 46, 59.)

22 **V. Design defects also contributed to the cracked weld.**

23 Elements of Tank 4's design also contributed to its eventual failure. The fitting Chart used to  
24 join Tank 4's fill tube to its inner vessel was not designed to sit flush against the inner vessel—the  
25 fitting is flat, while the inner vessel is curved. (*Id.* at 38-39.) Chart admits both that it would have been  
26 feasible to manufacture Tank 4 with a fitting that sat flush and that there were no disadvantages to  
27 doing so. (*Id.*, Ex. 38 (Chart's Answers to RFA Set 4) at Answer No. 11; *id.*, Ex. 47 (Chart's Answers  
28 to ROG Set 6) at Answer No. 2.)

1 [REDACTED]  
2 [REDACTED]. (*Id.*, Ex. 1 (Kasbekar Am. Rep.) at 38-39.) [REDACTED]  
3 [REDACTED]. (*Id.* at 52-  
4 53, 56.)  
5 [REDACTED]  
6 [REDACTED]  
7 [REDACTED]  
8 [REDACTED]  
9 [REDACTED]  
10 [REDACTED]. (*Id.* at 53, 57, 61-62.)

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23 [REDACTED]. (*Id.* at 53, 62.)

In addition, the manufacturing defect discussed in the previous section could also be construed  
24 as a design defect. Chart contends that even though its design specifications call for a full-penetration  
25 weld, Tank 4's partial-penetration weld conformed to its design and that it "intended a seal weld ...  
26 with no minimum thickness." (Zeman Decl., (Chart's Answers to RFA Set 4) at Answer Nos. 4, 6.)  
27 [REDACTED]

1 [REDACTED] (Id.,  
 2 Ex. 1 (Kasbekar Am. Rep.) at 61-62.)

3 **VI. Chart knew Tank 4's controller was defective but did not recall it.**

4 Tank 4 came with a Chart TEC 3000 electronic controller that PFC was using to monitor the  
 5 tank's conditions and sound alarms if the liquid nitrogen level dropped below 6 ½ inches. (Id., Ex. 32  
 6 (10/09/19 Pacific MSO 30(b)(6) and Conaghan Dep.) at 64-65, 72; *id.*, Ex. 53 (CHART070053) Record  
 7 # 1783; *id.*, Ex. 30 (09/09/20 Conaghan Dep.) at 160; *id.*, Ex. 2 (11/06/20 Report of E. Leaphart  
 8 "Leaphart Rep.") at 25; *see id.*, Ex. 48 (02/06/20 Gustafson Dep.) at 165-166.) If that controller had  
 9 been working at the time of the March 4th incident, PFC would have been alerted to the sudden vacuum  
 10 failure and could have moved Tank 4's eggs and embryos to the lab's backup tank before any damage  
 11 was done. (Id., Ex. 49 (11/20/20 Supplemental Expert Report of G. Centola ("Centola Supp. Rep."))  
 12 at 4-5; *id.*, Ex. 34 (MSO001984) at 1988-1989; *id.*, Ex. 33 (Pacific MSO 30(b)(6) and Romney Dep.)  
 13 at 194; *id.*, Ex. 29 (Popwell Dep.) at 87-88.) Even if no one was in the IVF lab at the time, Tank 4's  
 14 alarm system was hooked to a Sensaphone that was programmed to relay the alarm to PFC's  
 15 embryologists—four of whom lived within 30 minutes of the IVF lab. (Id., Ex. 30 (09/09/20 Conaghan  
 16 Dep.) at 54-56, 59-61; *id.*, Ex. 34 (MSO001984) at 1988-1989.)

17 About two weeks before the March 4th incident, however, Tank 4's electronic controller  
 18 malfunctioned. (Id., Ex. 33 (Pacific MSO 30(b)(6) and Romney Dep.) at 111-112.) The controller lost  
 19 its ability to accurately detect Tank 4's liquid nitrogen level and temperature: it continuously reported a  
 20 liquid nitrogen level of 0 and a temperature of -273° C, even though the tank was full and the  
 21 temperature of liquid nitrogen is -196° C. (Id., Ex. 32 (10/09/19 Pacific MSO 30(b)(6) and Conaghan  
 22 Dep.) at 75; *id.*, Ex. 2 (Leaphart Rep.) at 31.) These false readings caused the controller to repeatedly  
 23 sound false alarms and continuously add liquid nitrogen to an already full tank. (Id., Ex. 32 (10/09/19  
 24 Pacific MSO 30(b)(6) and Conaghan) at 76-77, 187-189.) PFC's Lab Director tried troubleshooting the  
 25 controller, but the only way he was able to stop the false alarms and continuous filling was to unplug  
 26 the controller. (Id. at 79; Zeman Decl., Ex. 33 (Pacific MSO 30(b)(6) and Romney Dep.) at 112-113;  
 27 *id.*, Ex. 34 (MSO001984) at 1986.) This was not the first time that one of the TEC 3000 controllers at  
 28 PFC had malfunctioned and the Lab Director was hesitant to pay for yet another faulty controller. (Id.,

1 Ex. 32 (10/09/19 Pacific MSO 30(b)(6) and Conaghan) at 72-73.) While PFC looked into alternatives,  
 2 the lab shifted to manual monitoring of Tank 4's liquid nitrogen levels—the same procedure it uses to  
 3 monitor its smaller cryogenic containers. (*Id.*, Ex. 32 (10/09/19 Pacific MSO 30(b)(6) and Conaghan  
 4 Dep.) at 114-115; *id.*, Ex. 34 (MSO001984) at 1986.)

5 Chart contends PFC should have made different choices when faced with constant false alarms  
 6 and a controller that wouldn't stop filling an already full tank with liquid nitrogen. (*Id.*, Ex. 49 (Centola  
 7 Supp. Rep.) at 4-5.) The extent to which PFC is to blame for the March 4th incident will be a central  
 8 issue during the upcoming trial, but one thing is certain: if Chart had recalled Tank 4's controller before  
 9 the March 4th incident, PFC would never have been put in that position. [REDACTED]

10 [REDACTED]  
 11 [REDACTED] (*Id.*, Ex. 50 (Gonzalez Dep.) at 33.) It had a name for the defect:  
 12 "SN=0," because the controller's serial number would typically reset to 0 when it malfunctioned. (*Id.*,  
 13 Ex. 77 (EXTRON-000223) at 1; *id.*, Ex. 78 (CHART031817) at subject line.) [REDACTED]

14 [REDACTED]  
 15 [REDACTED]  
 16 [REDACTED] (*Id.*, Ex. 51 (CHART004576).)

17 [REDACTED]  
 18 [REDACTED] (*Id.*, Ex. 52 (Chart 30(b)(6)  
 19 and Bies Dep.) at 222-223; *id.*, Ex. 54 (EXTRON000325) at 326; *id.*, Ex. 55 (CHART033664) at 665;  
 20 Ex. 56 (CHART008978); *id.*, Ex. 57 (EXTRON004150); *id.*, Ex. 58 (CHART017944); *id.*, Ex. 59  
 21 (CHART038721) at 722.) [REDACTED]

22 [REDACTED]  
 23 [REDACTED] (*Id.*, Ex. 59 (CHART038721) at 722.)

24 • [REDACTED]  
 25 [REDACTED] (*Id.*, Ex. 54 (EXTRON000325) at 326.)  
 26 • [REDACTED]  
 27 [REDACTED] (*Id.*)

- [REDACTED] (Zeman Decl, Ex. 55) (CHART033664) at 665.)

• [REDACTED] (Id., Ex. 56)  
(CHART008978.)

• [REDACTED] (Id., Ex. 57 (EXTRON004150).)

(*Id.*, Ex. 58 (CHART017944).)

(*Id.*, Ex. 59 (CHART038721) at 722.)

Ex. 60 (CHART002854) at 255.) As one of Chart's field service engineers explained, "It was our thought process that this touch screen controller would be the end – hopefully the end-all, be-all to fix these interference issues." (*Id.*, Ex. 41 (Junnier Dep.) at 94-95.)

(*Id.*, Ex. 50 (Gonzalez Dep.) at 34.) Chart also released retrofit kits that could be used on existing TEC 3000 controllers to resolve the SN=0 defect. (*Id.*, Ex. 41 (Junnier Dep.) at 94-95; *id.*, Ex. 61 (Wade Dep.) at 128-130.) But Chart never told TEC 3000 users that they needed the retrofit to resolve a known defect. (*Id.*, Ex. 41 (Junnier Dep.) at 94-96; *id.*, Ex. 61 (Wade Dep.) at 104, 129; *id.*, Ex. 73 (11/13/20 Pacific MSO 30(b)(6) and Conaghan Dep.) at 64-65.) Chart knew that facilities like PFC were continuing to use defective TEC 3000 controllers, and it knew they would often continue to use those controllers even after they malfunctioned. (*Id.*, Ex. 35 (Brooks Dep.) at 165-166; *id.*, Ex. 52 (Chart 30(b)(6) and Bies Dep.) at 228; *id.*, Ex. 41 (Junnier Dep.) at 77-79.)

1 [REDACTED]  
 2 [REDACTED] (*Id.*, Ex. 62 (CHART028403) at 404.)

3 Chart was in a unique position to know just how dangerous it could be to operate one of its  
 4 cryogenic tanks with a defective controller, but still did nothing. Ordinary users know that the vacuum  
 5 insulation in cryogenic tanks gradually degrades as the tank ages, and they know to keep a lookout for  
 6 signs that the tank is losing vacuum. (*Id.*, Ex. 14 (Wining Am. Rep.) at 14.) But only Chart knew that  
 7 an interior weld crack could cause an overnight vacuum failure in its cryogenic tanks. (*Id.*, Ex. 11  
 8 (DFMECA).) [REDACTED]

9 [REDACTED] (*Id.*, Ex. 44 (CHART062204); *id.*, Ex. 45 (CHART070695) at 696; *id.*, Ex. 46  
 10 (CHART008310) at 310.) [REDACTED]

11 [REDACTED]  
 12 [REDACTED] (*Id.*, Ex. 52 (Chart 30(b)(6) and Bies) at 54-56; *id.*,  
 13 Ex. 40 (CHART000007) at 9; *id.*, Ex. 63 (CHART20048); *id.*, Ex. 64 (CHART007923).) Armed with  
 14 this knowledge, Chart had a responsibility to recall or retrofit its defective TEC 3000 controllers and  
 15 ensure that any future sudden vacuum failures could be detected and addressed before the biological  
 16 samples inside were damaged. Even now—after the March 4th incident damaged 2,500 frozen embryos  
 17 and 1,500 frozen eggs—Chart still has not publicly disclosed the SN=0 defect or recalled the defective  
 18 TEC 3000 electronic controllers used by medical facilities around the country. (*Id.*, Ex. 52 (Chart  
 19 30(b)(6) and Bies Dep.) at 224.)

20 **VII. The March 4th incident damaged Plaintiffs' eggs and embryos.**

21 Plaintiffs' eggs and embryos were among those stored in Tank 4 during the March 4th incident.  
 22 As a result of Chart's defective weld and defective controller, those eggs and embryos were subjected  
 23 to hazardous conditions and irreparably damaged. (*Id.*, Ex. 14 (Wining Am. Rep.) at 17-24.) The  
 24 jagged ice crystals that form when frozen tissue is exposed to elevated temperatures caused cellular  
 25 damage that greatly diminishes the likelihood that Plaintiffs' eggs and embryos will lead to a successful  
 26 pregnancy. (*Id.* at 17.)

27 PFC cautions patients against using Tank 4 eggs and embryos, and when patients have tried, the  
 28 result has been dramatically lower success rates at every step of the IVF process. (*Id.* at 46; Zeman

1 Decl., Ex. 66 (Herbert Dep.) at 240. 244-247; *id.*, Ex. 79 (PFC\_000027) at 32; *id.*, Ex. 65 (11/06/20  
 2 Expert Report of N. Jewell (“Jewell Rep.”)) ¶¶ 30-44.) The chance of achieving a live birth from a  
 3 frozen egg stored in Tank 4 is now 88% lower than it was before the March 4th incident, and the  
 4 chance of achieving a live birth from a frozen embryo is now 72% lower:

	<b>Pre-Incident</b>	<b>Post-Incident</b>	<b>Change</b>
Chance of live birth per egg	9.6%	1.2%	-88%
Chance of live birth per embryo	47.8%	13.4%	-72%

9 (*Id.*, Ex. 14 (Wninger Am. Rep.) ¶ 52.)

10 The cumulative impact on Plaintiffs’ chances of having children using their frozen eggs and  
 11 embryos is significant. For example, Plaintiff I.J. froze 18 eggs and before the March 4th incident could  
 12 have expected those eggs would yield an average of 2.7 children, with a 95% probability that she would  
 13 give birth to at least one child. But after the March 4th incident, I.J. can now only expect an average  
 14 of 0.2 births and only has a 19% probability of giving birth to at least one child.

Plaintiff	# Stored	Egg age	<b>Pre-Incident</b>		<b>Post-Incident</b>	
			Exp. Births	Chance of 1+	Exp. Births	Chance of 1+
A.B./C.D.	4 embryos	29	1.9	92%	0.5	44%
E.F.	9 eggs	34	1.4	77%	0.1	10%
G.H.	2 eggs	38	0.2	17%	0.0	2%
I.J.	18 eggs	34	2.7	95%	0.2	19%

23 (*Id.*, ¶ 54.)

24 In addition, there are good reasons to avoid using Tank 4 eggs or embryos altogether. (*Id.*,  
 25 ¶¶ 56-60.) As PFC’s President explained, there is no information in the scientific or medical literature  
 26 about the clinical or developmental consequences of using eggs or embryos that have been exposed to  
 27 unsafe temperatures: “Can you imagine the experiment where you thaw a human embryo  
 28 uncontrollably and then try to make a baby out of it? I don’t think so.” (Zeman Decl., Ex. 66 (Herbert

1 Dep.) at 240.) Plaintiffs' experts agree and have testified they would have serious reservations about  
 2 using Tank 4 tissue in a frozen embryo transfer. (*Id.*, Ex. 14 (Wininger Am. Rep.) ¶ 60; *id.*, Ex. 67  
 3 (11/15/19 Somkuti Dep.) at 100.) Among their concerns is the number of low birthweights that have  
 4 resulted when patients have used Tank 4 tissue. (*Id.*, Ex. 14 (Wininger Am. Rep.) ¶¶ 59, 60; *id.*, Ex. 68  
 5 (11/06/20 Report of S. Somkuti, as amended on 11/16/20 ("Somkuti Am. Rep.")) ¶ 29.) Low  
 6 birthweights are associated with increased risk for a variety of health problems throughout one's  
 7 lifetime, and of the babies born using Tank 4 tissue, 17% have been born with low birthweights—about  
 8 twice the normal rate. (*Id.*, Ex. 14 (Wininger Am. Rep.) at ¶ 59.)

### 9 **VIII. The March 4th incident caused Plaintiffs financial harm and emotional distress.**

10 The impact of the March 4th incident on Plaintiffs' lives is difficult to overstate. Plaintiffs' eggs  
 11 and embryos represented a substantial investment in their future; an investment for which Plaintiffs had  
 12 paid a hefty price—and not just a financial price, but a physical and emotional one as well. Plaintiffs  
 13 A.B. and C.D., who had four embryos in Tank 4, paid over \$40,000 for their fertility treatments, while  
 14 Plaintiffs E.F., G.H., and I.J. each paid between \$10,000 and \$20,000 to retrieve and cryopreserve their  
 15 eggs. (*Id.*, Ex. 80 (A.B.'s Answers to Chart's ROGS) at Answer No. 24; *id.*, Ex. 81 (C.D.'s Answers to  
 16 Chart's ROGS) at Answer No. 21; *id.*, Ex. 82 (E.F.'s Answers to Chart's ROGS) at Answer No. 21; *id.*,  
 17 Ex. 83 (G.H.'s Answers to Chart's ROGS) at Answer No. 21; *id.*, Ex. 84 (I.J.'s Answers to Chart's  
 18 ROGS) at Answer No. 21.1) These fertility treatments were stressful, invasive, and socially isolating.  
 19 They required Plaintiffs to take daily hormone injections that cause soreness, bruising, nausea, bloating,  
 20 fatigue, mood swings, irritability, restlessness, depression, and anxiety. (Zeman Decl., Ex. 68 (Somkuti  
 21 Rep.) ¶¶ 20, 26.) Plaintiff E.F. recalled "how scared I was of using the needles ... how I was very  
 22 irritable. [My boyfriend] and I got into a lot of fights. I was crying. I felt anxious." (*Id.*, Ex. 17 (Grill  
 23 Rep.) at 40.) In the days leading up to the attempted egg retrieval, Plaintiffs were required to make  
 24 multiple visits to a fertility specialist for transvaginal ultrasounds and hormone level evaluations. (*Id.*,  
 25 Ex. 68 (Somkuti Rep.) ¶ 19.) The added time commitments and rising uncertainty about whether their  
 26 egg follicles would develop properly only added to Plaintiffs' stress. (See, e.g., *id.*, Ex. 17 (Grill Rep.)  
 27 at 23.) As did the egg retrieval itself, which is a surgical procedure that requires monitored anesthesia  
 28

1 and involves the insertion of a hollow needle through the vaginal wall and into an ovary. (*Id.*, Ex. 68  
 2 (Somkuti Rep.) ¶ 21.)

3 After all Plaintiffs had invested, to learn that their eggs and embryos had been damaged in the  
 4 March 4th incident and were likely no longer viable was devastating. As Plaintiffs A.B. and C.D. put it,  
 5 “Those embryos were—were our family. Those were our children … you can’t replace them.” (*Id.*,  
 6 Ex. 17 (Grill Rep.) at 49.) “The majority of our married life was spent creating those embryos—those  
 7 were our world and they are gone.” (*Id.* at 51.) To this day, A.B. is “always grieving the ‘what if’ …  
 8 then there’s the clash with reality and I have to deal with the grief all over again.” (*Id.* at 52.)

9 When Plaintiff E.F. heard about the tank failure, she “cried all morning.” (*Id.* at 41. Her mother  
 10 came to stay with her because she was having nightmares and was “screaming in my dreams.” (*Id.*)  
 11 She felt like “the rug was pulled out from underneath me and instead of feeling like I was building a  
 12 future, I felt stuck in quick sand.” (*Id.*)

13 Plaintiff G.H. recalls feeling numb when she first heard about the March 4th incident and  
 14 described a “mourning process of the fact that I went through this, you know, somewhat traumatic  
 15 experience to buy myself some insurance. And then that insurance was destroyed. … [I]t was  
 16 emotional. It was sad.” (*Id.* at 32.) She thinks about her lost eggs every day. (*Id.* at 33.) Due to low  
 17 ovarian reserves, G.H. was only able to retrieve and cryopreserve two eggs, but as she put it, “Two eggs  
 18 are more than zero. Those were my hope.” (*Id.*)

19 Plaintiff I.J. was filled with shock and disbelief—thinking, “Why me? Why my tank?” (*Id.*  
 20 at 25.) Two months later, she “had a miscarriage, and things got really bad after that.” (*Id.*) She didn’t  
 21 know if the stress from the March 4th incident helped to cause that miscarriage, she started to doubt her  
 22 fertility, and she “became frustrated and angry that [her] insurance policy was gone.” (*Id.*) As I.J. put it,  
 23 “I paid to have my eggs harvested and available for when I needed them, and they’re gone. Those were  
 24 my 34-year-old eggs, and I can’t get them back. My options have been taken from me.” (*Id.* at 26.)

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 27  
 28

## ARGUMENT

**I. Chart is not entitled to summary judgment on the issue of causation.**

**A. Kasbekar's expert opinion is that Tank 4 failed due to Chart's defective weld.**

In conjunction with its motion for summary judgment, Chart has moved to preclude Plaintiffs' forensic engineer, Anand Kasbekar, from testifying at trial. If that motion is granted, Chart says Plaintiffs will be unable to establish Tank 4 caused the March 4th incident and so summary judgment should be entered in its favor. (Chart's Mot. for Summary Judgment ("Chart Mot."), ECF 628, at 11-12); *see also Celotex Corp. v. Catrett*, 477 U.S. 317, 322 (1986) (summary judgment is proper in the event of a "complete failure of proof concerning an essential element" of plaintiffs' claims).

Kasbekar is a former Adjunct Assistant Professor at Duke University with more than thirty years of experience analyzing fractured metal components. (Zeman Decl., Ex. 1 (Kasbekar Am. Rep.) at App. A.) He participated in the parties' joint inspection and testing of Tank 4, analyzed Tank 4's fracture surfaces, and intends to testify that the March 4th incident was caused by a defective weld that suffered a progressive fatigue crack. (*Id.* at 10-11, 44-51, 59-61.) That crack allowed the liquid nitrogen to seep into Tank 4's vacuum insulation layer, resulting in a total loss of Tank 4's ability to maintain its contents at cryogenic temperatures and triggering an implosion of Tank 4's inner vessel. (*Id.* at 59-61.)

Plaintiffs have separately opposed Chart's efforts to exclude Kasbekar's testimony. If Plaintiffs' arguments prevail, and Kasbekar is permitted to testify, Plaintiffs will have shown they can present admissible evidence to support their contention that Tank 4 caused the March 4th incident—making summary judgment improper. *See Cortez v. Glob. Ground Support, LLC*, No. 09-4138 SC, 2010 WL 5173861, at \*5 (N.D. Cal. Dec. 15, 2010) (“Because the Court denies Defendants’ challenge to Plaintiff’s [expert] evidence of causation, Defendants have failed to show that Plaintiff lacks any evidence” to support the causation element of Plaintiff’s product liability claims.)

B. Other evidence also suggests Tank 4 lost all its liquid nitrogen and imploded due to a manufacturing or design defect.

Even if Kasbekar were unable to testify at trial, however, summary judgment would still be inappropriate. Plaintiffs believe that expert testimony is the most helpful and efficient way to present their theory of causation to the jury, but that theory is not wholly dependent on Kasbekar's opinions.

With or without opinion testimony, Plaintiffs can introduce evidence showing a crack in Tank 4's interior weld. Numerous photographs of the crack were taken during the parties' joint post-mortem inspection of Tank 4, including those shown above, in Kasbekar's report, and in the reports submitted by Chart's forensic engineer. (*See* Summary of Facts, Section III, *supra*; Zeman Decl., ¶ 2; *id.*, Ex 1 (Kasbekar Am. Rep.) at 12-13, 17-19; *id.*, Ex. 6 (Parrington Rep.) at 16-17.) Any of the engineers and attorneys who attended that inspection can be called as percipient witnesses to describe the location of the crack and authenticate the photographs taken by those in attendance. (*See* Zeman Decl., ¶ 2.) The jury can also consider deposition testimony from Chart's expert, who agreed during his deposition that the crack was a "through crack ... that went from the inner vessel on one side through to the vacuum space on the back." (*Id.*, Ex. 9 (Parrington Dep.) at 93.)

Plaintiffs also can introduce evidence showing Tank 4 failed as a result of its cracked weld. Chart's own failure modes analysis identifies that very weld as a potential cause of tank failure. (*Id.*, Ex. 11 (DFMECA) at DEW-3, DEW-4.) The document states that a crack or leak in the weld would cause liquid nitrogen to draw into the tank's vacuum space, expanding rapidly and causing an inner vessel implosion, total vacuum loss, and loss of function of the freezer—exactly what happened to Tank 4. (*Id.*)

(Zeman Decl.,  
Ex. 45 (CHART070695) at 696.)

Finally, Plaintiffs can introduce evidence that a manufacturing or design defect is responsible for the crack. A product contains a manufacturing defect if it differs from the manufacturer's specifications, and it contains a design defect if the product is manufactured as intended but nonetheless is a substantial factor in causing harm or fails to perform as safely as an ordinary user would have expected. *See CACI 1201-1204; Johnson v. United States Steel Corp.*, 240 Cal. App. 4th 22, 32 (2015).

. (*Id.*, Ex. 10  
(CHART070444); *id.*, Ex. 70 (Ingram Dep.) at 49-50, 66; *id.*, Ex. 9 (11/16/20 Parrington Dep.) at 113-114, 139-140.) And even if Tank 4 were manufactured as intended, Chart has admitted that its design

1 included “no minimum thickness,” which might reasonably have contributed to the weld eventually  
 2 cracking. (*Id.*, Ex. 38 (Chart’s Answers to RFA Set 4) at Answer No. 1.) Plaintiffs have also presented  
 3 considerable evidence that Tank 4 failed to perform as safely as an ordinary user of cryogenic  
 4 containers would have expected it to perform. (*See* Summary of Facts, Section II, *supra*.)

5 A jury faced with this evidence could reasonably conclude that the March 4th incident was  
 6 caused by a manufacturing or design defect, making summary judgment inappropriate. *See Anderson v.*  
 7 *Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). Expert testimony would certainly be helpful to the jury,  
 8 but it is not required. For example, in *Pierson v. Ford Motor Company*, the Ninth Circuit found that  
 9 even without the assistance of an expert, there was sufficient evidence from which the jury could infer  
 10 that a deficient latch in Ford’s van caused the plaintiff’s injuries. *Pierson*, 445 F. App’x 966, 968-69  
 11 (9th Cir. 2011). So, too, here, where even without expert testimony, Plaintiffs’ evidence establishes that  
 12 PFC filled Tank 4 with 14 inches of liquid nitrogen on March 3rd, (Zeman Decl., Ex. 3 (Cauthen Dep.)  
 13 at 61-62; *id.*, Ex. 37 (MSO000310) at 360; *see id.*, Ex. 53 (CHART070093) at Record # 29848-28835);  
 14 less than 24 hours later, Tank 4 had lost all of that liquid nitrogen and had begun imploding, (*id.*, Ex. 32  
 15 (10/09/19 Pacific MSO 30(b)(6) and Conaghan) at 41-42, 112-113); post-mortem inspections revealed  
 16 a cracked in one of Tank 4’s interior welds, (*id.*, ¶ 2); and Chart’s own failure modes analysis states that  
 17 a cracked interior weld causes a total loss of vacuum insulation and an implosion ,(*id.*, Ex. 11  
 18 (DFMECA) at DEW-3, DEW-4.)

19 The only alternative explanation that Chart has presented is that PFC lied, failed to fill Tank 4  
 20 with liquid nitrogen in the days or weeks leading up to the March 4th incident, and Tank 4  
 21 spontaneously imploded as a result—causing the weld to crack from PFC’s abuse rather than because  
 22 Chart manufactured a product with a defective weld. (Chart’s Mot. To Exclude Kasbekar and Winingier,  
 23 ECF No. 629, at 14; Zeman Decl., Ex. 5 (11/20/20 Supplemental Report of F. Miller) at 23-24.) If  
 24 Chart can persuade a jury to disregard PFC’s sworn testimony and digital records and buy into its  
 25 spontaneous-implosion theory, it may then be entitled to judgment on the issue of causation. But at this  
 26 stage in the proceedings, the Court must credit PFC’s testimony and draw all reasonable inferences in  
 27 Plaintiffs’ favor. *Anderson*, 477 U.S. at 255. And at least one reasonable inference that can be drawn  
 28 from PFC’s testimony, the physical evidence, and Chart’s own records is that Tank 4 suffered an

1 overnight vacuum failure and began imploding due to a defective weld. *See also Hill-Jones v. Gen.*  
 2 *Elec. Co.*, No. 14-cv-2636-JGB, 2015 WL 12732713, at \*3 (C.D. Cal. May 5, 2015) (“the plaintiff in a  
 3 strict liability action is not required to disprove every possible alternative explanation of the injury in  
 4 order to have the case submitted to the jury”) (quoting *Campbell v. Gen. Motors Corp.*, 32 Cal. 3d 112,  
 5 121 (1982)).

6 **II. Chart is not entitled to summary judgment under the consumer expectation test for a  
 7 design defect.**

8 There are two alternative tests for a design defect: (i) the consumer expectation test, which asks  
 9 whether a product performs as safely as an ordinary consumer would have expected it to perform; and  
 10 (ii) the risk-benefit test, which asks only whether the product’s design was a substantial factor in  
 11 causing plaintiffs’ harm, but also gives the defendant an opportunity to show that the benefits of its  
 12 design outweigh the risks. CACI 1203, 1204; *Demara v. The Raymond Corp.*, 13 Cal. App. 5th 545  
 13 (2017). Both tests may be used in the same case, and the instructions given to the jury are required to  
 14 make it clear that the two tests are alternatives. *Id.*

15 Chart nonetheless contends that the consumer expectation test is not suited for this case because  
 16 Tank 4 was a complex product and not within the everyday experience of an average juror. (Chart Mot.  
 17 at 12-13.) California courts have affirmed, however, that “the consumer expectation test can apply to  
 18 complex or technical products, even where the use of these products may not be within the common  
 19 knowledge of jurors.” *Demara*, 13 Cal. App. 5th at 561 (applying test to forklift). If a product has a  
 20 specialized use making it unfamiliar to the general public, the jury may still apply the consumer  
 21 expectation test based on the minimum expectations of those persons who do use the product. *Vanier v.*  
 22 *Bagttery Handling Sys., Inc.*, No. CV S-O6-978 LKK/PAN, 2007 WL 2688731, at \*6 (E.D. Cal. Sept.  
 23 12, 2007) (applying test to battery gantry). As one California court explained, “there are certain kinds  
 24 of accidents—even where fairly complex machinery is involved—which are so bizarre that the average  
 25 juror, upon hearing the particulars might reasonably think, ‘Whatever the user may have expected from  
 26 that contraption, it certainly wasn’t that.’” *Id.* (quoting *Akers v. Kelley, Co.*, 173 Cal.App.3d 633, 650,  
 27 219 Cal. Rptr. 513 (1985)). Moreover, expert testimony can be used to help the jury understand what a  
 28

1 specialized product's actual consumers expect from the product. *Soule v. Gen. Motors Corp.*, 8 Cal. 4th  
 2 548, 567, n.4 (1994).

3 Even if complexity matters, cryogenic containers are not particularly novel or complicated  
 4 devices. PFC describes its tanks to its patients as “really like giant thermos flasks on wheels” and “in  
 5 effect like a large thermos flask since its vacuum lined.” (*Id.*, Ex. 71 (MSO018818) at 820; *id.*, Ex. 72  
 6 (PLTF-ABCD-001031) at 1034); *see also id.*, Ex. 32 (10/09/19 Pacific MSO and Conaghan Dep.) at  
 7 172-173.) [REDACTED]

8 [REDACTED] (*Id.*, Ex. 48 (02/06/20  
 9 Gustafson Dep.) at 21; *id.*, Ex. 35 (Chart 30(b)(6) and Brooks Dep.) at 20-21; *see also id.*, Ex. 22  
 10 (12/01/20 Miller Dep.) at 16 [REDACTED]).) Chart points out that its cryogenic tanks  
 11 are sometimes used with electronic controllers, but that controller is optional and was not in use on  
 12 Tank 4 at the time of the March 4th incident. The issue for the jury is not whether Chart’s TEC 3000  
 13 controller performed as expected, but whether Chart’s cryogenic container performed as expected. The  
 14 jury may need to understand something about vacuum insulation and metal welds to make that  
 15 determination, but neither concept is particularly complex and both are common features of products  
 16 that consumers do use on an everyday basis.

17 Ultimately, in deciding whether to instruct the jury on the consumer expectations test, the  
 18 critical questions for the Court are not whether jury members are familiar with cryogenic containers or  
 19 whether cryogenic containers are complex. *Demara*, 13 Cal. App. 5th at 558-59; *Vanier*, 2007 WL  
 20 2688731 at \*7. The critical questions are whether ordinary users of cryogenic containers would have  
 21 minimum expectations about their safety for storing biological tissue, and whether the circumstances of  
 22 Tank 4’s failure permit an inference that those minimum expectations were not met. *Id.* Plaintiffs have  
 23 presented evidence that permits the Court to answer both questions in the affirmative. One of Plaintiffs’  
 24 experts, David Wninger, is an IVF Lab Director who has worked with cryogenic containers for thirty  
 25 years, trained and supervised embryologists to work with cryogenic containers, and inspected other IVF  
 26 labs’ cryogenic containers for the College of American Pathologists. (Zeman Decl., Ex. 14 (Wninger  
 27 Am. Rep.) ¶¶ 1-2.) He has testified that ordinary users of cryogenic containers, like Wninger himself  
 28 and the lab staff he works with on a daily basis, expect those containers to be capable of safely storing

1 biological material, expect the containers' vacuum insulation to degrade gradually rather than suddenly  
 2 and all at once, and expect the containers to show physical symptoms when they begin losing their  
 3 ability to keep samples cold. (*Id.*, Ex. 15 (Winingar Dep.) at 36-37, 55-56, 65-66; *id.*, Ex. 14 (Winingar  
 4 Am Rep.) ¶¶ 37-42.) The way that Tank 4 failed—losing its vacuum insulation overnight, consuming  
 5 14 inches of liquid nitrogen in less than 24 hours, and imploding—is well beyond what any ordinary  
 6 user of cryogenic tanks would reasonably expect. (*Id.*; *see also* Ex. 16 (Centola Dep.) at 46.) Under  
 7 these circumstances, the jury would be well-justified in concluding that Tank 4 failed the consumer  
 8 expectations test for a design defect. Plaintiffs' respectfully request that the Court give jury members  
 9 that chance and deny Chart's request for summary judgment. *See Demara*, 13 Cal. App. 5th at 562  
 10 (reversing summary judgement where “jurors could reasonably find that these ordinary consumers of  
 11 the [forklift] could form certain minimum safety assumptions and expectations for the product”);  
 12 *Vanier*, 2007 WL 2688731 at \*7 (“defendant has not shown as a matter of law that the defect alleged  
 13 here is of such a technical nature that the ordinary user … could not have any assumptions about the  
 14 minimum safety of that aspect of the product”).

15 **III. Chart is not entitled to summary judgment on Plaintiffs' claim for failure to recall or**  
 16 **retrofit Tank 4's controller.**

17 **A. The evidence shows Chart's failure to recall or retrofit was a substantial factor that**  
 18 **contributed to the damage caused by the March 4th incident.**

19 In addition to holding Chart strictly liable for defects that existed when Tank 4 was  
 20 manufactured, Plaintiffs also seek to hold Chart liable for negligently failing to recall or retrofit Tank 4  
 21 after learning that its electronic controller suffered from the dangerous “SN=0” defect. *See Hernandez*  
 22 *v. Badger Constr. Equip. Co.*, 28 Cal. App. 4th 1791, 1827–28 (1994) (“Failure to conduct an adequate  
 23 retrofit campaign may constitute negligence apart from the issue of defective design.”). Chart seeks an  
 24 entry of summary judgment on this claim, as well. (Chart Mot. at 13-15.) It says Plaintiffs' liability  
 25 theories are inconsistent: “[t]he alleged weld failure has nothing to do with the controller,” and  
 26 Plaintiffs therefore cannot show that Chart's failure to recall or retrofit that controller could have  
 27 caused them harm.  
 28

1           Chart is correct that Plaintiffs contend the most immediate cause of the March 4th incident was  
 2 a crack in Tank 4's defective weld. But an injury may have more than one contributing cause: "A  
 3 defendant's negligent conduct may combine with another factor to cause harm ... a defendant cannot  
 4 avoid responsibility just because some other person, condition, or event was also a substantial factor in  
 5 causing the plaintiff's harm." *Yanez v. Plummer*, 221 Cal. App. 4th 180, 187 (2013); *see also* CACI No.  
 6 431. Here, the evidence shows that if Chart had retrofitted Tank 4's controller prior to the March 4th  
 7 incident, that retrofitted controller would have alerted PFC that Tank 4's liquid nitrogen levels were  
 8 dropping due to a sudden loss of vacuum, and PFC could have transferred Plaintiffs' eggs and embryos  
 9 to a backup tank before they were damaged. (Zeman Decl., Ex. 49 (Centola Supp. Rep.) at 4-5; Ex. 33  
 10 (Pacific MSO 30(b)(6) and Romney Dep.) at 194; *id.*, Ex. 29 (Popwell Dep.) at 87-88; *id.*, Ex. 34  
 11 (MSO001984) at 1988-1989. .) [REDACTED]

12 [REDACTED]

13 [REDACTED] (*Id.*, Ex. 59 (CHART038721) at 722.) But with this knowledge  
 14 and even though Chart had a retrofit available to fix the defect, it failed to retrofit Tank 4 prior to the  
 15 March 4th incident. (*Id.*, Ex. 41 (Junnier Dep.) at 94-96; *id.*, Ex. 61 (Wade Dep.) at 104, 128-130.)

16           Chart also failed to issue a recall notice to PFC, which could have alerted PFC that Tank 4's  
 17 controller suffered from a known defect; that a retrofit was available to fix that defect; and that it was  
 18 critically important for Tank 4's controller to be replaced immediately because, while rare, sudden  
 19 vacuum failures had been known to occur in Chart's cryogenic tanks. (*Id.*, Ex. 73 (11/13/20 Pacific  
 20 MSO 30(b)(6) and Conaghan Dep.) at 64-65; *id.*, Ex. 41 (Junnier Dep.) at 94-95; *id.*, Ex. 61 (Wade  
 21 Dep.) at 104, 128-130; *id.*, Ex. 11 (DFMECA) at DEW-3, DEW-4.) By March 4th, PFC had  
 22 experienced the defect first-hand and had asked its supplier for a solution, but it had yet to receive a  
 23 replacement for its malfunctioning TEC 3000 controller. (*Id.*, Ex. 21 (MSO024063).) PFC did not know  
 24 that the issue was caused by a known defect in the TEC 3000 or that a ready fix was available, and  
 25 expected that manual monitoring would be sufficient in the interim. (*Id.*, Ex. 33 (Pacific MSO and  
 26 Romney Dep.) at 114-115; *id.*, Ex. 30 (09/09/20 Conaghan Dep.) at 19.) Chart knew that customers like  
 27 PFC continued to use their cryogenic tanks after the controller malfunctioned and it knew why:  
 28 customers expect that any loss in the tank's ability to maintain cryogenic temperatures will occur

1 gradually due to normal degradation in the tanks' vacuum insulation—not suddenly and all at once.  
 2 (*Id.*, Ex. 35 (Brooks Dep.) at 165-166; *id.*, Ex. 52 (Chart 30(b)(6) and Bies Dep.) at 228; *id.*, Ex. 27  
 3 (CHART050770).) Only Chart knew just how dangerous it was to operate one of its cryogenic tanks  
 4 without a controller, even on a temporary basis. (*Id.*, Ex. 11 (DFMECA) at DEW-3, DEW-4; *id.*, Ex. 43  
 5 (CHART051322); *id.*, Ex. 44 (CHART062204).) [REDACTED]  
 6 [REDACTED]  
 7 [REDACTED] (*Id.*, Ex. 62 (CHART028403) at 404.).)

8 This evidence is sufficient to establish that both Chart's failure to retrofit Tank 4's controller  
 9 and its failure to issue an appropriate recall notice caused harm to Plaintiffs' eggs and embryos.  
 10 California's causation standard requires only that Chart's failure to retrofit or recall Tank 4 contribute  
 11 to the March 4th incident—it need not be the sole cause and its contribution need only be "more than  
 12 negligible or theoretical." *Rutherford v. Owens-Illinois, Inc.*, 16 Cal. 4th 953, 978 (1997); *see also*  
 13 CACI No. 430. The evidence suggests that Chart's failure to retrofit or recall Tank 4's controller was  
 14 indeed a contributing factor, and that if Chart had installed a retrofit or issued an appropriate recall  
 15 notice, the tank's eventual weld failure could have been detected and damage to Plaintiffs' eggs and  
 16 embryos averted.

17 **B. The evidence establishes Chart owed Plaintiffs a duty to recall or retrofit Tank 4.**

18 Chart focuses its argument on causation, but also suggests that Chart did not owe Plaintiffs "any  
 19 duty to recall the controller." (Chart Mot. at 14.) It cites *Montez v. Ford* to support its position, but that  
 20 case says little about a manufacturer's duty to remedy a known defect; it held only that the trial court's  
 21 failure to instruct the jury on negligence was harmless because the jury found defendants' product was  
 22 not defective—a finding that was fatal under both negligence and strict liability theories of recovery.

23 *Montez v. Ford Motor Co.*, 101 Cal. App. 3d 315, 319 (1980).

24 Subsequent cases have confirmed that under circumstances such as these, a defendant does  
 25 indeed have a duty to its customers to conduct an adequate retrofit campaign. For instance, in *Lunghi v.*  
*26 Clark Equipment Company*, where the defendant manufacturer learned of the dangerous propensities of  
 27 its machine after the product had been on the market for a while, the California Court of Appeal held  
 28 that a reasonable jury could find that the manufacturer's knowledge created a duty to conduct an

1 adequate retrofit campaign. *Lunghi v. Clark Equip. Co.*, 153 Cal. App. 3d 485, 494 (1984). And in  
 2 *Hernandez v. Badger*, the California Court of Appeal similarly found that the evidentiary record  
 3 “supports a finding [defendant] breached its duty to conduct an adequate retrofit campaign.” *Hernandez*  
 4 *v. Badger Constr. Equip. Co.*, 28 Cal. App. 4th 1791, 1828 (1994). Like Chart, the manufacturer in that  
 5 case had addressed a known safety issue in newly manufactured products but decided not to retrofit the  
 6 products it had already sold. *Id.* Based on that evidence, the court found “the jury could properly  
 7 conclude [defendant] did not do ‘everything reasonably within its power to prevent injury’ to  
 8 plaintiffs.” *Id.* at 1828; *see also Hensley-Maclean v. Safeway, Inc.*, No. CV 11-01230 RS, 2014 WL  
 9 1364906, at \*6 (N.D. Cal. Apr. 7, 2014) (denying summary judgment where “numerous California  
 10 decisions have explicitly or implicitly recognized that a seller’s duty under negligence may extend  
 11 beyond the point of sale”)

12 As in *Lunghi* and *Hernandez*, the evidence presented by Plaintiffs supports a finding that Chart  
 13 owed them a duty to conduct an adequate retrofit campaign. [REDACTED]

14 [REDACTED]  
 15 [REDACTED]  
 16 (Zeman Decl., Ex. 50 (Gonzalez Dep.) at 33.) It knew that the TEC 3000 was used to monitor eggs,  
 17 embryos, and other sensitive biological tissue. (*Id.*, Ex. 52 (Chart 30(b)(6) and Bies) at 54-56; *id.*, Ex.  
 18 40 (CHART000007) at 9; *id.*, Ex. 63 (CHART20048); *id.*, Ex. 64 (CHART007923).) And it had  
 19 addressed the defect in future controllers and developed retrofit kits to fix the issue in existing  
 20 controllers, but still failed to retrofit Tank 4’s controller or even inform PFC that the retrofit was  
 21 available. (*Id.*, Ex. 73 (11/13/20 Pacific MSO 30(b)(6) and Conaghan Dep.) at 64-65; *id.*, Ex. 41  
 22 (Junnier Dep.) at 94-95; *id.*, Ex. 61 (Wade Dep.) at 104, 128-130.) A jury hearing these facts could  
 23 reasonably conclude that Chart’s knowledge imposed on them a duty to either conduct an adequate  
 24 retrofit campaign or issue an appropriate recall notice to customers like PFC.

25 **C. Plaintiffs’ claim does not require expert testimony.**

26 Chart also objects that Plaintiffs’ evidence is not in the form of expert testimony. But expert  
 27 testimony is not the only form of evidence upon which a jury can reasonably rely in finding that Chart  
 28 negligently failed to retrofit or recall Tank 4’s controller prior the March 4th incident. The need for

1 expert testimony depends upon the facts of each case. *See Pierson*, 445 F. App'x at 968-69. Courts  
 2 faced with arguments like Chart's will often wait until after trial to determine if the evidence presented  
 3 is sufficient to establish a defective product contributed to plaintiffs' injuries, or whether expert  
 4 testimony is necessary. *See Lexington Ins. Co. v. Schrader-Bridgeport Int'l, Inc.*, No. 09-1509 SC, 2010  
 5 WL 11586816, at \*3 (N.D. Cal. June 2, 2010); *NBTY, Inc. v. Sw. Forest Prod., Inc.*, No. CV 12-00872-  
 6 JEM, 2013 WL 5651564, at \*1 (C.D. Cal. Oct. 15, 2013).

7 Here, expert testimony is not necessary to establish that TEC 3000 controllers suffer from a  
 8 dangerous defect that causes them to lose the ability to accurately monitor liquid nitrogen levels.  
 9 Chart's own deposition testimony and its own internal documents establish that TEC 3000 controllers  
 10 suffered from that very defect, that Chart had a name for the defect, and that Chart knew it was  
 11 important "to take action immediately." (Zeman Decl., Ex. 59 (CHART038721) at 722; *id.*, Ex. 77  
 12 (EXTRON-000223) at 1; *id.*, Ex. 78 (CHART031817) at subject line.) Chart's electrical expert, Eldon  
 13 Leaphart, does not disagree—in fact, he discusses the SN=0 defect in his report and cites some of the  
 14 same deposition testimony that Plaintiffs intend to rely upon at trial to describe the malfunction. (*Id.*,  
 15 Ex. 2 (Leaphart Rep.) at 34; *id.*, Ex. 74 (Leaphart Dep.) at 76 ("Q. Have you ever heard of the serial  
 16 number equals zero issue? A. From reviewing materials received, yes.").) Leaphart also testified that  
 17 Tank 4 displayed the symptoms of the SN=0 defect, as did multiple witnesses who worked with the  
 18 controller at PFC. (*Id.*, Ex. 74 (Leaphart Dep.) at 76; *e.g.*, *id.*, Ex. 32 (10/09/19 Pacific MSO 30(b)(6)  
 19 and Conaghan) at 74-77; *id.*, Ex. 33 (09/10/19 Pacific MSO 30(b)(6) and Romney) at 111-112.) Under  
 20 these circumstances, where Plaintiffs can prove the existence of a defect through several alternate  
 21 avenues, there is no reason to also require them to do so through expert testimony. *See United States v.*  
 22 *Mirama Enterprises, Inc.*, 185 F. Supp. 2d 1148, 1160 (S.D. Cal. 2002) ("The Court does not require  
 23 expert testimony to find that a reasonable person *could* conclude that the juicer contained a defect,"  
 24 where manufacturer was informed of at least 23 prior incidents).

25 Nor is an expert witness necessary to establish that Chart owed Plaintiffs a duty to recall or  
 26 retrofit Tank 4, or that its failure to do so contributed to Plaintiffs' injuries. As the *Hernandez* and  
 27 *Lunghi* cases illustrate, duty can be established through proof of the defendants' knowledge and, here,  
 28 that knowledge is evident from Chart's documents and does not require expert credentials to appreciate.

1 *Hernandez*, 28 Cal. App. 4th at 1827–28; *Lunghi*, 153 Cal. App. 3d at 494. Similarly, Plaintiffs can  
 2 demonstrate Chart’s failure to retrofit or recall Tank 4’s controller contributed to Plaintiffs’ injuries  
 3 without using expert testimony. (*See Argument, Section II, supra.*) PFC’s lab staff have adequately  
 4 explained how a functional controller would have alerted them that Tank 4’s liquid nitrogen levels had  
 5 dropped below 6.5 inches and afforded them time to transfer Plaintiffs’ eggs and embryos to a backup  
 6 tank before irreversible damage occurred. (Zeman Decl., Ex. 53 (CHART070053) Record # 1783; *id.*,  
 7 Ex. 30 (09/09/20 Conaghan Dep.) at 160; *id.*, Ex. 33 (Pacific MSO 30(b)(6) and Romney Dep.) at 194;  
 8 *id.*, Ex. 29 (Popwell Dep.) at 87-88; *id.*, Ex. 34 (MSO001984) at 1988-1989.) In fact, Chart claims that  
 9 PFC should be deemed contributorily negligent for not replacing Tank 4’s controller on its own. (*Id.*,  
 10 Ex. 49 (Centola Supp. Rep.) at 4; *id.*, Ex. 16 (11/23/20 Centola Dep.) at 215-217.) If a jury could  
 11 reasonably conclude that PFC’s failure to replace Tank 4’s controller in the 17 days preceding the  
 12 March 4th incident contributed to Plaintiffs’ injuries, as Chart contends, it should also be permitted to  
 13 conclude that Chart’s failure to replace Tank 4’s controller in the 3 years preceding the March 4th  
 14 incident contributed to Plaintiffs’ injuries. *See Yu Lian Tan v. Coast Crane Co.*, No. C-10-3570 MMC,  
 15 2013 WL 749514, at \*2 (N.D. Cal. Feb. 27, 2013) (Defendant “has not cited to any authority suggesting  
 16 that such question of causation is, in this instance, a matter exclusively within the purview of experts.”).

**IV. Chart is not entitled to summary judgment on Plaintiffs’ claim for punitive damages.**

Chart also seeks partial summary judgment on the issue of punitive damages. (Chart Mot. at 15-16.) Plaintiffs contend that by hiding the TEC 3000 defect from its customers and repeatedly failing to retrofit or recall affected cryogenic tanks, Chart engaged in intentional concealment as well as in despicable conduct that was carried out in willful and conscious disregard for the rights of others. *See Civil Code 3294 (a), (c)(1)*. The evidence shows that Chart knew its customers used Chart cryogenic tanks to store eggs, embryos, and other sensitive biological tissue and used Chart TEC 3000 controllers to monitor liquid nitrogen levels inside the tank. (Zeman Decl., Ex. 52 (Chart 30(b)(6) and Bies) at 54-56; *id.*, Ex. 40 (CHART000007) at 9; *id.*, Ex. 63 (CHART20048); *id.*, Ex. 64 (CHART007923).) [REDACTED]

[REDACTED]  
 26 [REDACTED]  
 27 [REDACTED]  
 28 [REDACTED]

1 [REDACTED] (Id., Ex. 59 (CHART038721) at 722.) [REDACTED]

2 [REDACTED]

3 [REDACTED] (Id., Ex. 50

4 (Gonzalez Dep.) at 33; *id.*, Ex 41 (Junnier Dep.) at 95.) Chart even had a retrofit available that would  
 5 have fixed the problem, but chose not to tell customers about it. (*Id.*, Ex., 41 (Junnier Dep) at 96; *id.*,  
 6 Ex. 61 (Wade Dep.) at 128-130.) [REDACTED]

7 [REDACTED] (Id., Ex. 62

8 (CHART028403) at 404.)

9 A jury faced with these facts could reasonably conclude that Chart intentionally concealed  
 10 material facts or acted despicably and with willful and conscious disregard for the highly sensitive and  
 11 often irreplaceable biological tissue stored in its cryogenic tanks. *See Pfeifer v. John Crane, Inc.*, 220  
 12 Cal. App. 4th 1270, 1300-01 (2013) (affirming punitive damages where defendant did not share what it  
 13 knew about the dangers of its products with users). Chart was in a unique position to know what could  
 14 go wrong with its tanks and how quickly those tanks could lose their ability to keep samples safely  
 15 stored at cryogenic temperatures. Chart knew that its interior welds could crack, and that when they did,  
 16 the tanks' vacuum insulation would be instantly compromised and the tank would implode. (Zeman  
 17 Decl., Ex. 11 (DFMECA) at DEW-3, DEW-4.) And it knew that its customers would sometimes  
 18 continue to use their TEC 3000s after the controllers malfunctioned, not expecting that the vacuum  
 19 insulation could fail overnight. (*Id.*, Ex. 35 (Brooks Dep.) at 165-166; *id.*, Ex. 52 (Chart 30(b)(6) and  
 20 Bies Dep.) at 228; *id.*, Ex. 30 (09/09/20 Conaghan Dep.) at 19.) It was therefore foreseeable to Chart  
 21 that something like the March 4th incident would occur unless Chart first retrofitted or recalled its TEC  
 22 3000 controllers. In fact, given how long Chart withheld its knowledge from customers and how many  
 23 TEC 3000 controllers continue to be used to help monitor biological tissue, it was inevitable that a  
 24 malfunctioning TEC 3000 controller would contribute to a catastrophic loss of biological tissue.

25 [REDACTED]  
 26 [REDACTED]  
 27 [REDACTED]  
 28 [REDACTED] (Id., Ex. 64

1 (CHART007923.) [REDACTED]

2 [REDACTED] (*Id.*) And even after the  
3 March 4th incident demonstrated the tragic consequences of deliberately keeping its customers in the  
4 dark, Chart still has not altered its conduct. [REDACTED]

5 [REDACTED]  
6 [REDACTED] (Zeman Decl., Ex. 75)

7 (CHART015541) at 542.) [REDACTED]

8 [REDACTED] (*Id.*, Ex. 76 (CHART058287).) [REDACTED]

9 [REDACTED]  
10 [REDACTED] (*Id.* at 287.) Nearly three more years have elapsed since the March 4th incident, and Chart  
11 still has not publicly disclosed the SN=0 defect or informed customers that a retrofit is available to fix  
12 the defect. Without an award of exemplary damages sufficient to deter this sort of conduct, it appears  
13 that Chart will never disclose or meaningfully address the defect. *See Johnson & Johnson Talcum*  
14 *Powder Cases*, 37 Cal. App. 5th 292, 334 (2019) (“A defendant’s entire course of conduct may be  
15 considered for purposes of assessing punitive damage awards, including post-injury conduct.”)

16 **V. Chart is not entitled to summary judgment on Plaintiff G.H.’s claim for damages related  
17 to the diminished possibility of achieving a live birth.**

18 Chart’s final request for summary judgment is limited to Plaintiff G.H., who has low ovarian  
19 reserves but was able to harvest and cryopreserve two mature eggs that were stored in Tank 4. (Zeman  
20 Decl., Ex. 68 (Somkuti Rep.) ¶51.) Like the other Plaintiffs, G.H. suffered severe emotional distress as  
21 a result of the March 4th incident and seeks an award of economic and non-economic damages  
22 sufficient to compensate her for the loss of her reproductive tissue. (*Id.*, Ex. 17 (Grill Am. Rep.) at 28-  
23 35.) Chart says that a portion of those prospective damages are unrecoverable and asks the Court to find  
24 as a matter of law that the March 4th incident did not cause her a “diminished possibility of achieving a  
25 live birth.” (Chart Mot. at 17.)

26 Chart’s argument relies on two cases. In one, the trial court granted nonsuit after plaintiffs’  
27 experts could not say with a reasonable degree of medical certainty that defendant’s birth control pills  
28 caused plaintiff’s cervical cancer. *Jones v. Ortho Pharm. Corp.*, 163 Cal. App. 3d 396, 404 (1985). In

1 the other, the trial court granted nonsuit after plaintiffs failed to show with a reasonable degree of  
 2 medical certainty that negligent care was a substantial factor in bringing about the decedent's death.  
 3 *Bromme v. Pavitt*, 5 Cal. App. 4th 1487, 1492 (1992).

4 Chart likens the absence of medical certainty in those cases to G.H.'s chances of giving birth.  
 5 Just as the chance that birth control caused cervical cancer was less than 50% in *Jones*, and the chance  
 6 that medical negligence brought about decedent's death was less than 50% in *Bromme*, Chart says the  
 7 chance G.H. would be able to give birth using her two frozen eggs was less than 50%. But giving birth  
 8 is not akin to cancer or death; it is not an injury. The injury is G.H.'s diminished possibility of  
 9 achieving a live birth. Plaintiffs' evidence on that point is uncontested and shows that G.H.'s chances  
 10 dropped from 17% to 2% as a result of the March 4th incident. (Zeman Decl., Ex. 14 (Wninger Am.  
 11 Rep.) ¶ 54.) G.H.'s fertility options have likewise been diminished by the March 4th incident, as she is  
 12 now 42 years old with diminished ovarian reserves and no longer a good candidate for egg preservation  
 13 or IVF procedures. (*Id.*, Ex. 68 (Somkuti Rep.) ¶¶ 53, 65.)

14 Chart is fixated on the fact that G.H.'s chances of giving birth using her frozen eggs was always  
 15 less than 50%, but that is not the probability that matters—what matters is whether Plaintiffs' evidence  
 16 establishes a greater than 50% possibility that the March 4th incident caused G.H.'s chance of giving  
 17 birth to drop from 17% to 2% and diminished her fertility options. The *Bromme* case recognizes there is  
 18 a distinction: "The issue presented in this case is not the degree to which defendant's post-June 1981  
 19 acts may have contributed to Bromme's death, but the degree of certainty as to whether those acts  
 20 contributed at all." *Bromme*, 5 Cal. App. 4th at 1499.

21 Here, the degree of certainty as to whether the March 4th incident contributed to G.H.'s lower  
 22 chances of achieving a live birth is well above 50%. None of the three experts who testified that the  
 23 March 4th incident caused G.H. to suffer diminished fertility potential expressed any uncertainty. (See  
 24 Zeman Decl., Ex. 14 (Wninger Am. Rep.) ¶¶ 52-54; *id.*, Ex. 65 (Jewell Rep.) ¶ 26; *id.*, Ex. 68  
 25 (Somkuti Rep.) ¶¶ 53, 65.) In fact, Plaintiffs retained an expert in biostatistics, Prof. Nicholas Jewell, to  
 26 determine whether the lower chances of obtaining a live birth using Tank 4 tissue could be attributed to  
 27 something other than the March 4th incident. (See *id.*, Ex. 65 (Jewell Rep.) ¶¶ 16, 22-29.) Jewell found  
 28 the pre-Incident and post-Incident IVF success rates were strongly statistically different, with p-values

1 under 0.001, meaning that the statistical likelihood that the March 4th incident is responsible for the  
 2 diminished possibility of achieving a live birth is greater than 99.9%. (*See id.*, ¶¶ 30-42, 65, 71; *see also*  
 3 *id.*, Ex. 85 (10/15/19 Report of N. Jewell) ¶ 41 (discussing p-values).)

4 Plaintiffs have, in other words, established to a reasonable degree of certainty that the March 4th  
 5 incident caused a diminished possibility of achieving a live birth. The lack of certainty that led to  
 6 nonsuits in *Jones* and *Bromme* is not present here and should not be used to limit the damages that  
 7 Plaintiff G.H. can request at trial. *See Uriell v. Regents of Univ. of Cal.*, 234 Cal. App. 4th 735, 746  
 8 (2015) (*Jones* and *Bromme* do not apply if the plaintiff can present evidence that defendants' conduct  
 9 was likely a substantial factor in causing harm).

## 10 CONCLUSION

11 For the reasons stated, Plaintiffs request that the Court deny Chart's motion for summary  
 12 judgment and permit the case to proceed to trial.

14 Dated: January 29, 2021

15 Respectfully submitted,

16 By: /s/ Amy M. Zeman

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